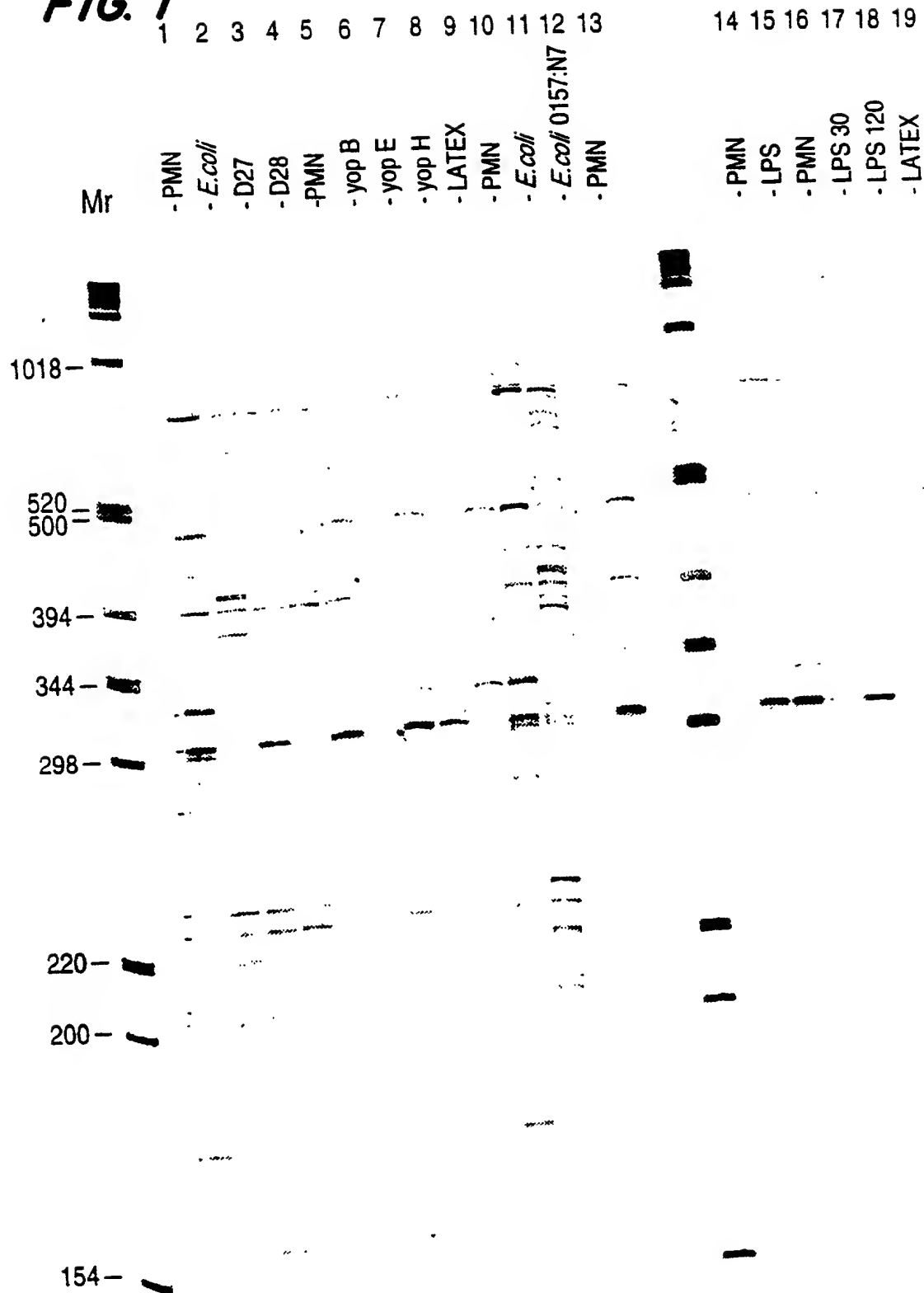
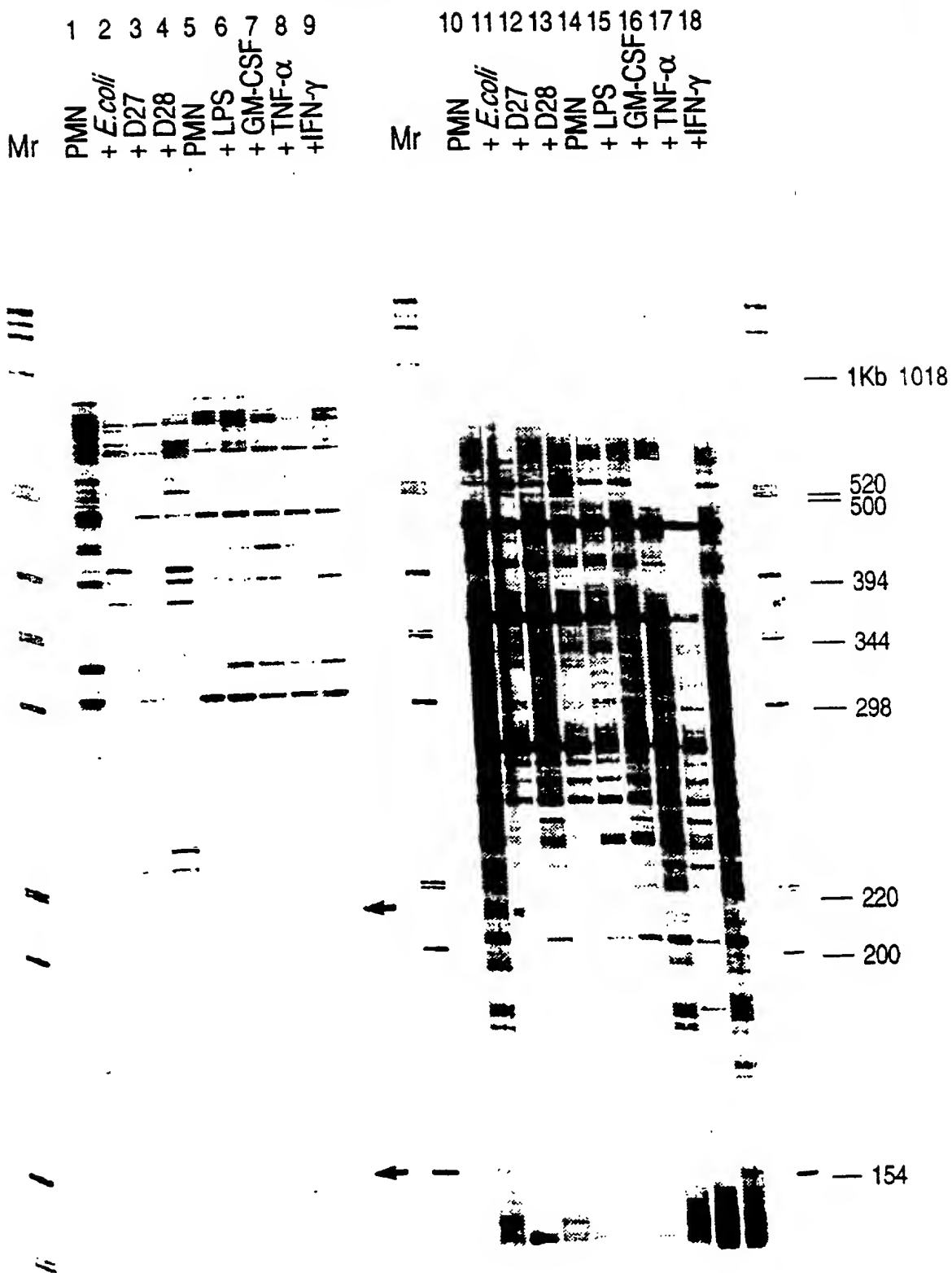


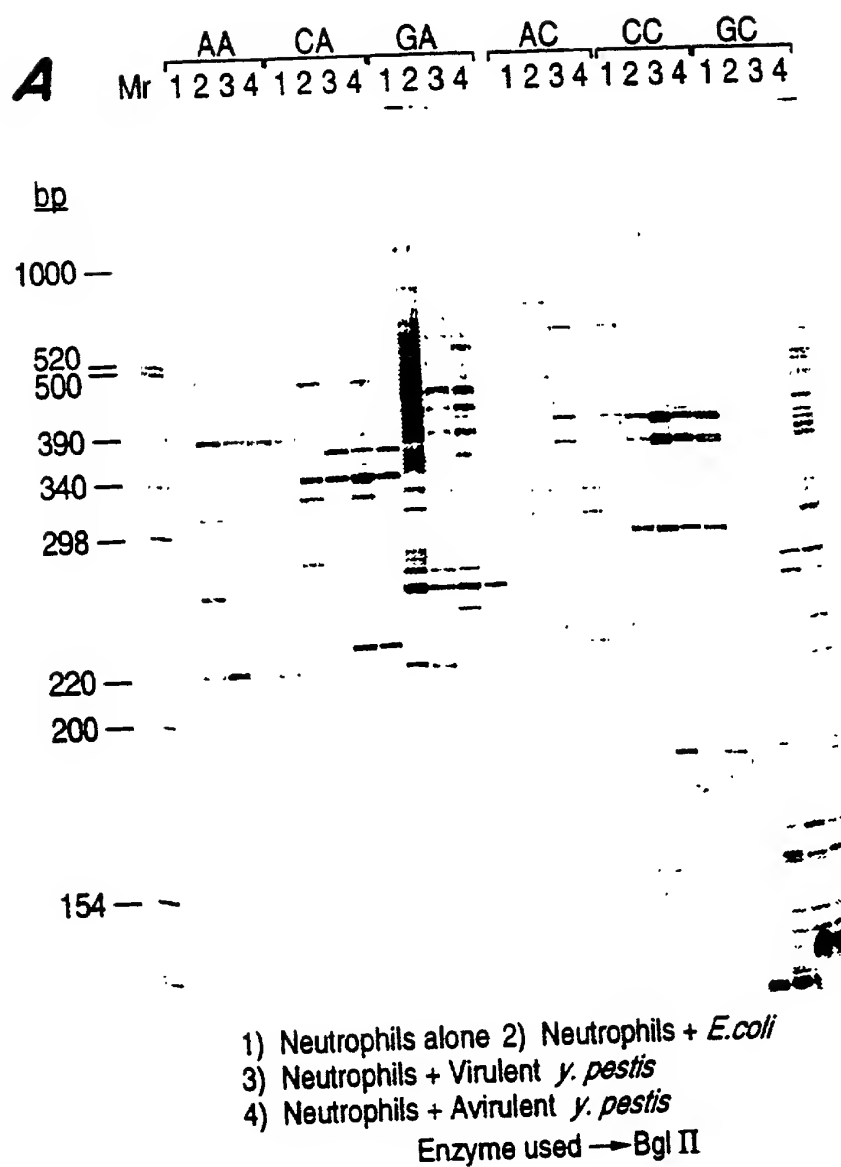
**FIG. 1**



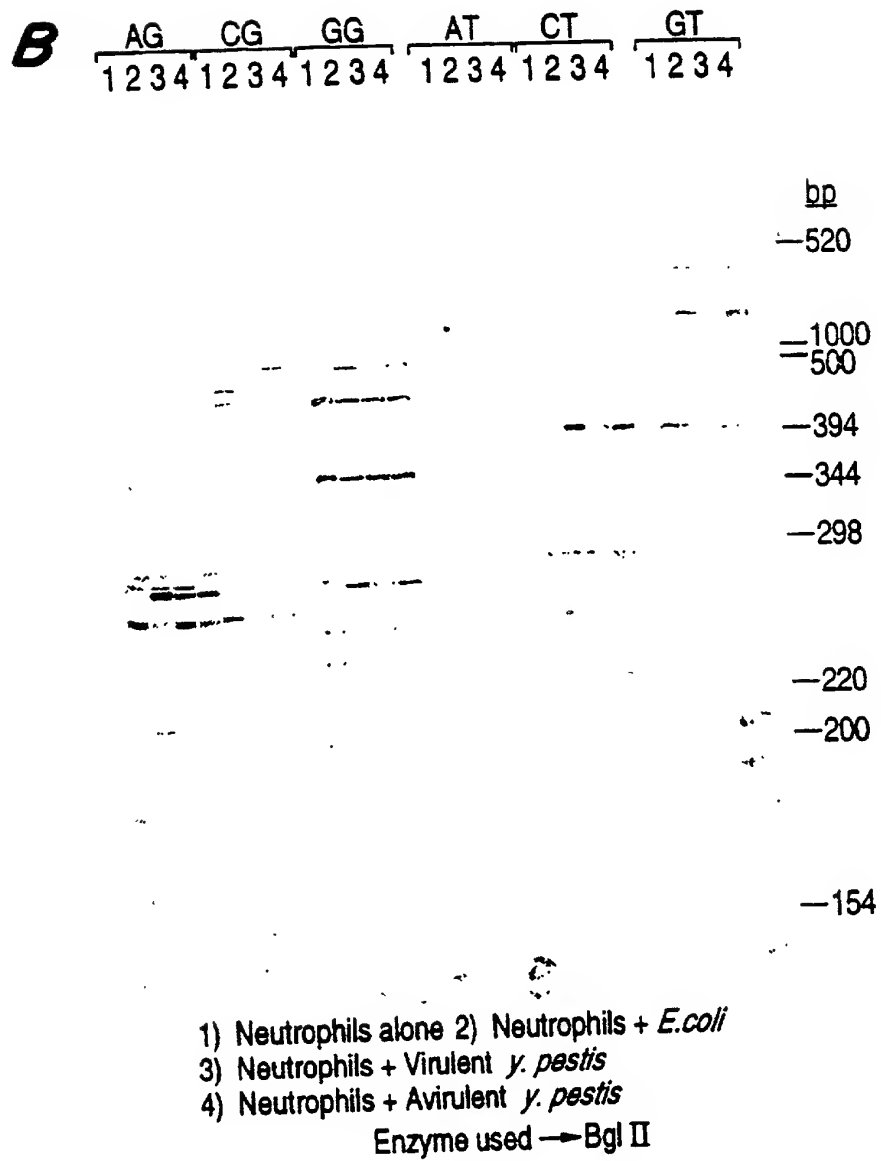
**FIG. 2**



# FIG. 3



**FIG. 3(Cont.)**



**Differential Display Summary of Results (I) Known Genes**

No.	Clones	NIN2	Expression Patterns				Gene Bank Search and Analysis
			Control	E. coli	Vinulent	Avinulent	
1	NP102-3	AA	0	+	0	+	NADH-ubiquinone oxidoreductase ASH1 subunit
2	IN12-B12	AC	+	+++	++	+++	human ubiquitin/polyubiquitin
3	NP104-5	AA	+	+++	++	++	MAP kinase kinase 3b
4	NP131-3	CA	++	+	+++	+++	cdc2/CDC28-like protein kinase (clk1)
5	B20-4	AC	+++	++	±	+	human cyclin-dependent kinase inhibitor
6	NP119-1	AG	0	+	0	++	bcl-2 related (bfl-1) mRNA
7	NP126-3	AT	0	+++	+	+++	human B-cell lymphoma 3-encoded protein bcl-3 mRNA
8	NP124-3	AT	++	+++	++	+++	helix-loop-helix basic phosphoprotein (GOS8)
9	B14-3	AC	++	+++	0	+	human nucleolar phosphoprotein B23 (nucleophosmin)
10	IN23-E11	AC	±	+++	+	+++	LD78 β (human homolog of mouse MIP1α)
11	NP125-2	AT	0	++	±	++	LD78 receptor (HIM74)
12	NP149-1	CG	+++	+	++	++	vacuolar H <sup>+</sup> pumping ATPase (16KD proteolipid subunit)
13	B23-2	AC	++	+++	+	++	vacuolar H <sup>+</sup> pumping ATPase (56KD subunit)
14	NP139-1	CC	±	++	+	+++	plasma membrane Ca <sup>2+</sup> pumping ATPase (56KD subunit)

**FIG. 4**

**Differential Display    Summary of Results (I)    Known Genes**

No.	Clones	NIN2	Expression Patterns				Gene Bank Search and Analysis
			Control	E. coli	Virulent	Avirulent	
15	NP105-1	AA	++++	±	+	++	human H3.3 gene exon 4
16	NP128-3	CA	0	+	++	++++	ribosomal protein S19
17	IN20-E8	AC	+	±	++	±	ribosomal protein S20
18	NP127-2	AT	+	+	±	+	poly(A) binding protein II
19	NP103-3	AA	++	+++	+	++++	Spermidine/Spermine N1-acetyltransferase
20	NP132-2	CA	+	±0	+	++	human GDP-dissociation inhibitor (LY-GDI)
21	B4-1	AC	+++	+++	+	+	bovine GTP binding regulatory protein $\gamma$ -6 subunit
22	NP107-2	AA	++++	++	+++	+++	human B4-2 protein
23	NP156-1	CG	++	+	++	++	ras-related protein p23/Rab-7
24	B5-4	AC	±	+++	+	++	mouse ras-related YTP1 protein/Rab-1A
25	B14-4	AC	+	+++	+	++++	human pre-B cell enhancing factor (PBEF)
26	B22-2	AC	++	+++	+	++	human complement decay accelerating factor
27	BamI	AC	+	++	++++	++	TNF $\alpha$ inducible protein B94

**FIG. 4 (CONT'D)**

Differential Display Summary of Results (I) EST Sequences

No.	Clones	N1N2	Expression Patterns				Gene Bank Search and Analysis
			Control	E. coli	Virulent	Avirulent	
1	NP101-3	AA	++	++	0	++	EST (GB/L81699/HSL81699)
2	NP108-3	AA	++	+	+	++	EST (GB/R09487/R09487)
3	NP113-2	AG	++	+	++	+	EST (GB/U79267/HSU79267)
4	NP114-2	AG	+++	+	++	+++	EST (GB/N26756/N26756)
5	NP115-3	AG	++	+	+++	+++	EST (GB/L49761/HUM78188)
6	NP116-3	AG	+	+	++	+	EST (EMB/F10736/HSC31C022)
7	NP117-2	AG	±	+++	++	+++	EST (GB/AA004905/AA004905)
8	NP120-3	AG	±	+	++	+	EST (GB/R16810/R16810)
9	NP121-2	AG	±	++	+	++	EST (GB/AA159075/AA159075)
10	NP122-1	AT	0	+	±	++	EST (GB/AA016979/AA016979)
11	NP133-1	CA	+++	++	+++	+++	EST (GB/AA190718/AA190718)
12	NP134-2	CA	0	±	++	+	EST (GB/T29287/T29287)
13	NP138-1	CC	+	++	+	+++	EST (GB/T58520/T58520)
14	NP150-1	CG	+	+++	+++	++++	EST (GB/AC001223/HISAC001223)
15	B7-1	AC	++	+	+	0	EST (DJB/D60083/IUM0841105A)

FIG. 4 (CONT'D)

**Differential Display Summary of Results (I) EST Sequences**

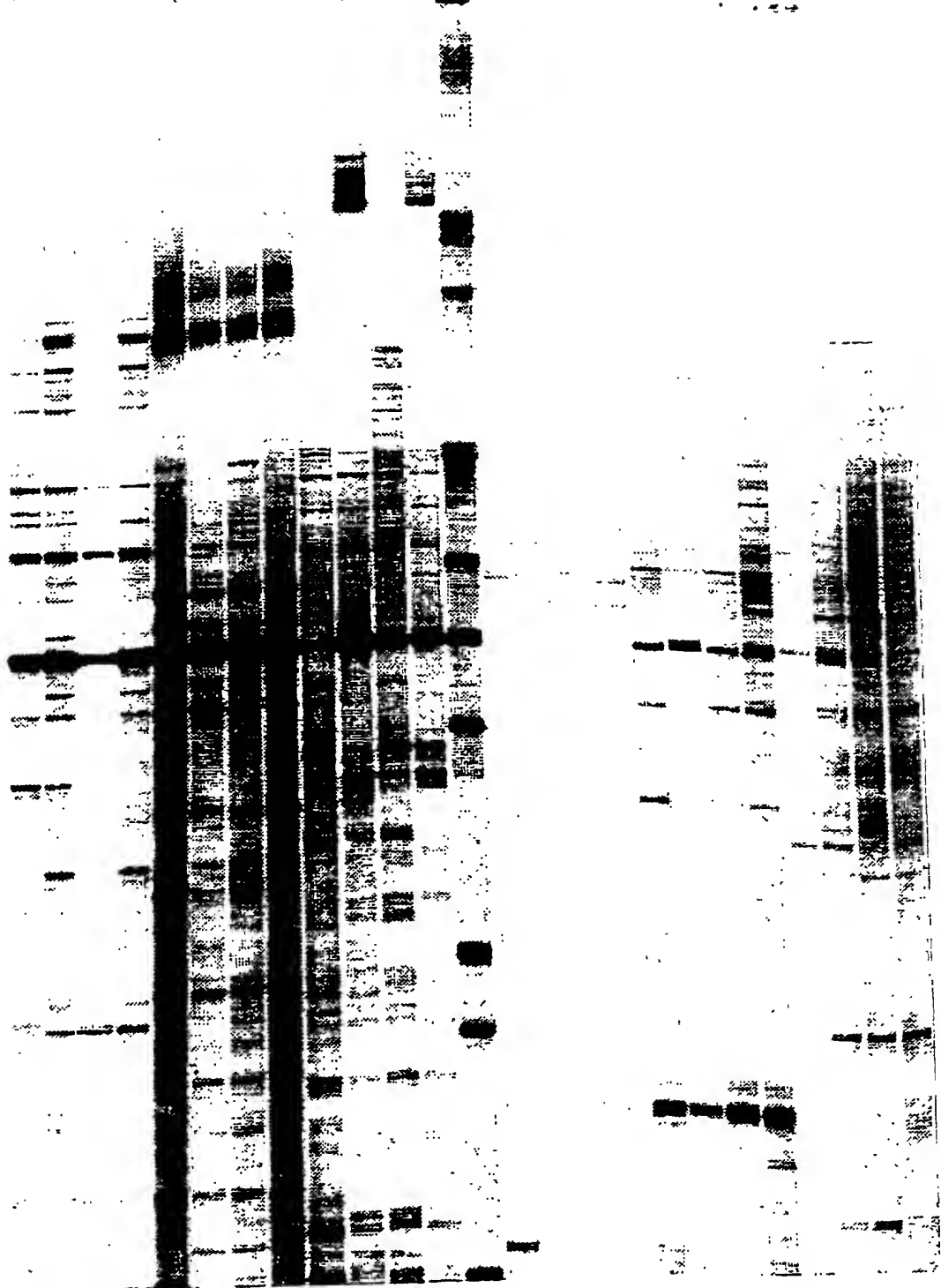
No.	Clones	NIN2	Expression Patterns				Gene Bank Search and Analysis
			Control	E. coli	Vinulent	Avinulent	
16	B8-1	AC	+++	+	++	0	EST (GB/R37008/R37008)
17	B10-1	AC	+++	++	0	+	EST (GB/W67981/W67981)
18	B12-2	AC	++	+++	+	+	EST (GB/N24729/N24729)
19	B13-4	AC	+++	++	+	+	EST (GB/N23012/N23012)
20	B15-2	AC	+++	±	++	±	EST (GB/R49664/R49664)
21	B17-2	AC	+++	+++	++	+	EST (GB/T34605/T34605)
22	B18-2	AC	+++	++	+++	+	EST (GB/AA055573/AA055573)
23	B19-5	AC	+	++	+	±	EST (GB/AA076421/AA076421)
24	B21-3	AC	+++	+++	+	++	EST (GB/AA150905/AA150905)
25	IN10-B10	AC	+	+++	+	+++	EST (GB/N21073/N21073)
26	IN19-E7	AC	0	+++	0	+	EST (GB/AA044087/AA044087)
27	IN21-E9	AC	+	+++	+	++	EST (GB/H44997/H44997)
28	IN22-E10	AC	+++	++	+++	+	EST (GB/N50114/N50114)
29	Bcl	AC	+++	+++	+	++	EST (EMB/Z39133/HSC11B122)

**FIG. 4 (CONT'D)**



**FIG. 5**

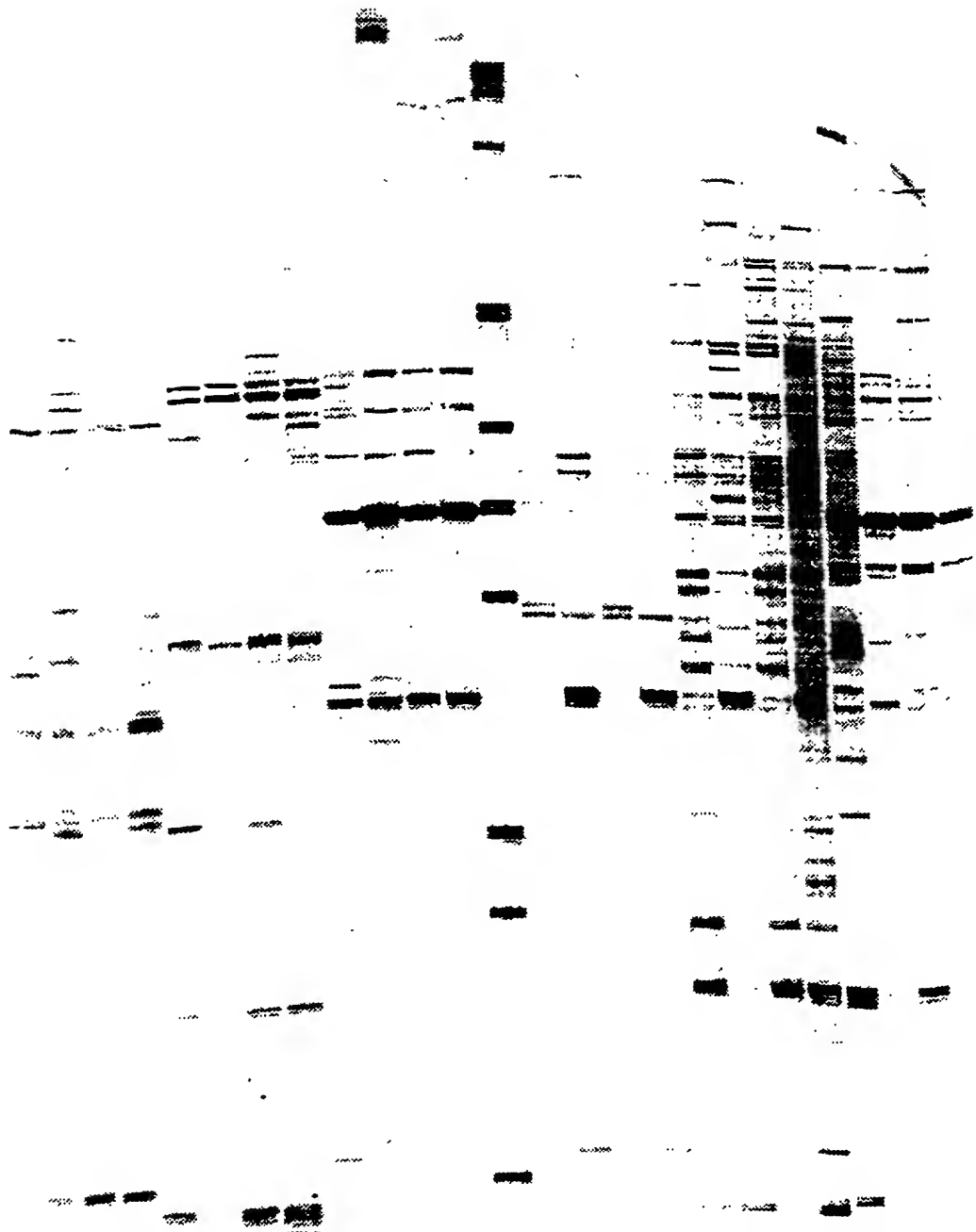
AC GC CC AT GT CT  
1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4



10004437-130501

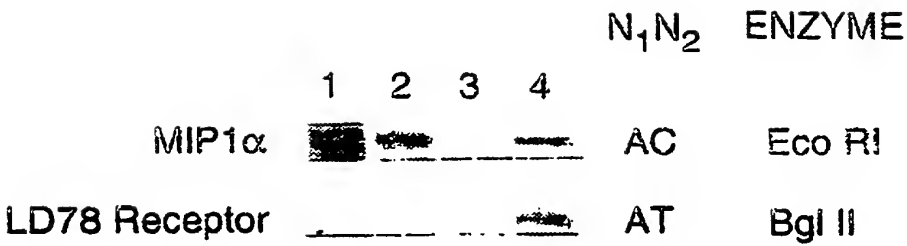
**FIG. 5 (Cont.)**

AA GA CA AG GG CG  
 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4



10004437 130501

**FIG. 6**



- 1. Neutrophils alone
- 2. Neutrophils + *E.coli*
- 3. Neutrophils + Virulent *y. pestis*
- 3. Neutrophils + Avirulent *y. pestis*

Figure 6